

REMARKS

The Office Action is discussed in detail below. Paragraph numbers refer to the paragraph numbers of the Office Action.

Claim Rejection 102

Claims 1-3, 5-7, 9, 11-13, 16 and 18 are rejected under 35 USC 102(b) as being anticipated by Megahed (US 4,015,056).

Claims 1,3,4,6,7,9,10,12,13,16 and 17 are rejected under 35 USC 102(b) as being anticipated by Terasaka (US 4,906,539).

Claims 1,2,6-8 and 12-14 are rejected under 35 USC 102(b) as being anticipated by Inoue et al (US 5,707,756).

Applicant's claim 1 has been amended to recite:

An active composition for an electrode of an alkaline electrochemical cell, comprising:

a nickel hydroxide material; and

a binder comprising a monosaccharide, a disaccharide, a pectin or a molasses.

Megahed is directed to an electrochemical cell having a divalent silver oxide (AgO) positive electrode (see col 6, line 14 of Megahed) and a zinc negative electrode (see col 5, line 60 of Megahed). In contrast, applicant's claim 1 is directed to an active material composition comprising a nickel hydroxide material. This is neither taught or suggested by Megahed.

Terasaka is directed to an electrochemical cell including a negative cadmium electrode. Terasaka provided no teaching or suggestion of an active material composition comprising a nickel hydroxide material.

Inoue is directed to a non-aqueous battery using a lithium-containing transition metal oxide as a positive electrode material (see column 11, lines 10-28). The lithium-containing transition metal oxide can be synthesized by mixing a lithium compound and a transition metal compound and then calcining the mixture (col 15, lines 63-67). Examples of lithium compounds are provided in column 16, lines 1-10. Examples of transition metal compounds are provided in column 16, lines 11-37. One specific example of a transition metal compound is nickel hydroxide (col 16, line 26). Hence, Inoue uses nickel hydroxide as one of the starting materials to make the lithium-containing transition metal oxide and it is this lithium-containing transition metal oxide that is

the active electrode composition that is mixed with a binder. Inoue's lithium-containing transition metal oxide (an oxide) is distinct from applicant's nickel hydroxide material (a hydroxide). Hence, Inoue fails to teach or suggest the active material composition as recited in applicant's claim 1.

Anticipation under 35 USC 102(b) requires that a single reference teach all the limitations of applicant's claimed invention. As noted, neither Megahed, Terasaka or Inoue teach an *active composition for an electrode of an alkaline electrochemical cell, comprising: nickel hydroxide; and a binder comprising a monosaccharide, a disaccharide, a pectin or a molasses*. Hence, neither Megahed, Terasaka or Inoue anticipate claim 1. Likewise, neither Megahed, Terasaka or Inoue anticipate claims 3-6 (which depend from claim 1 and include all of the limitations of claim 1).

Analysis of claims 7, 9-12

Claim 7 of applicant's invention (as amended) recites:
An electrode for an alkaline electrochemical cell, comprising:
an active composition including:

a nickel hydroxide material; and
a binder comprising a monosaccharide, a disaccharide, a pectin or a molasses.

As discussed neither Megahed, Terasaka nor Inoue teach or suggest an active composition including: a nickel hydroxide material; and a binder comprising monosaccharide, a disaccharide, a pectin or a molasses. Hence, neither Megahed, Terasaka nor Inoue anticipate claim 7 (or claims 9-12 which depend from claim 7).

Analysis of claims 13, 15-18

Applicant's independent claim 13 (as amended) recites:

13. *Alkaline electrochemical cell, comprising:*

at least one positive electrode;

at least one negative electrode; and

an alkaline electrolyte,

*said positive electrode having an **active material composition including a nickel hydroxide material and a binder comprising a monosaccharide, a disaccharide, a pectin or a molasses.***

As discussed, neither Megahed, Terasaka or Inoue teach or suggest an active material composition including a nickel hydroxide material and a binder comprising monosaccharide, a disaccharide, a pectin or a molasses. In addition, with regards to Inoue, it is noted that Inoue is directed to a non-aqueous battery while applicant's claim 13 is directed to an alkaline

electrochemical cell including an alkaline electrolyte. An alkaline electrolyte is an aqueous electrolyte. Hence, neither Megahed, Terasaka or Inoue anticipate claim 13 (or claims 15-18 which depend from claim 13).

In view of the amendments to the independent claims 1, 7 and 13, the rejection of claims 1-18 as being anticipated by either Megahed, Terasaka or Inoue is overcome and applicant respectfully requests it be removed.

Claim Rejections - 35 USC 103

Claims 3-5, 9-11 and 15-18 are rejected under 35 USC 103(a) as being unpatentable over Inoue et al as applied to claims 1,2,6-8 and 12-14 above, in view of either Megahed et al as applied to claims 1,3,5-7,9,11-13,16, and 18 above or Terasaka as applied to claims 1,3,4,6,7,9,10,12,13,16 and 17 above.

As discussed above, neither Megahed, Terasaka or Inoue teach or suggest an **active material composition including a nickel hydroxide material and a binder comprising a monosaccharide, a disaccharide, a pectin or a molasses** as recited in independent

claims 1, 7 and 13. Claims 3-5 depend from claim 1 and include as the limitations of claim 1. Claims 9-11 depend from claim 7 and include all the limitations of claim 7. Likewise, claims 15-18 depend from claim 17 and include all the limitations of claim 13.

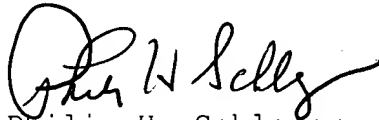
Hence, the rejection of claim 3-5, 9-11 and 15-18 under 35 USC 103(a) as being unpatentable over Inoue in view of either Megahed or Terasaka is improper and applicant respectfully requests it be removed.

SUMMARY

Claims 2, 8 and 14 have been cancelled. In view of the above amendment and remarks, the remaining claims 1, 3-7, 9-13, 15-18 are in condition for allowance. Applicants respectfully request reconsideration and withdrawal of the outstanding rejections and notification of allowance.

Should the Examiner have any questions or suggestions regarding the prosecution of this application, he is asked to contact applicants' representative at the telephone number listed below.

Respectfully submitted,



Philip H. Schlazer
Reg. No. 42,127

Date: February 12, 2002
Energy Conversion Devices
2956 Waterview Drive
Troy, MI 48309
Phone 248.293-0440 ext 6260
Fax 248 844-2273

Marked up copy of the amendment

1. (Amended) An active composition for an electrode of an alkaline electrochemical cell, comprising:

[an active electrode material] a nickel hydroxide material;
and

a binder comprising a monosaccharide, a disaccharide, a pectin or a molasses.

7. (Amended) An electrode for an alkaline electrochemical cell, comprising:

an active composition including:

[an active electrode composition] a nickel hydroxide material; and

a binder comprising a monosaccharide, a disaccharide, a pectin or a molasses.

13. (Amended) An alkaline electrochemical cell, comprising:

at least one positive electrode;

at least one negative electrode; and

an alkaline electrolyte,
said positive electrode [and/or said negative electrode] having an
active material composition including a nickel hydroxide material
and a binder comprising a monosaccharide, a disaccharide, a pectin
or a molasses.